## **Appendix O: Definition of Terms**

**2 x 2 Table:** A cross-tabulation of data such that subcategories of one characteristic are indicated horizontally (in rows) and subcategories of another characteristic are indicated vertically (in columns). Tests of association between characteristics in the columns and rows can be readily applied. Also known as a contingency table.

	ill	not ill
Exposed	а	b
Not Exposed	С	d

**Active surveillance:** A type of surveillance in which case reports are actively solicited from area physicians, laboratories or hospitals. More active surveillance may be warranted in an outbreak setting.

**Attack rate:** A type of cumulative incidence rate which expresses the occurrence of a disease among a specific population at risk observed for a limited period of time, often due to a very specific exposure.

**Carrier:** A person or animal that harbors a specific infectious agent, is asymptomatic and is a potential source of infection for man or animals.

**Case:** a person who meets a defined case definition at a specific point of time.

**Case-control study:** A type of observational analytic study. Enrollment into the study is based on presence ("case") or absence ("control") of disease. Characteristics such as previous exposures are then compared between cases and controls.

**Case definition:** A set of criteria used for investigative purposes to decide whether a person has a particular disease or whether a person is to be included in a "case" category by specifying clinical and laboratory criteria and by specifying limitations on time, place and person.

**Case finding:** The process of identifying all possible cases; this typically uses a broad case definition and occurs early in the investigation. Later in the investigation, case finding might be performed to assess the extent of the outbreak.

**Chain of custody**: a record that establishes the complete chronological disposition of an entity of concern (e.g., laboratory specimen document).

**Cluster:** Aggregation of relatively uncommon events or diseases in space and/or time in amounts believe or perceived to be greater than could be expected by chance.

**Cohort study:** A type of observational analytic study. Enrollment in the study is based on exposure characteristics or membership in a group. Disease, death or other health-related outcomes are then ascertained and compared.



**Common source outbreak:** An outbreak that results from a group of persons being exposed to an infectious agent or toxin from a single source.

**Confirmed case:** A person who has a positive laboratory result of the disease or agent that is associated with an outbreak.

**Contact:** Exposure to a source of an infection or a person so exposed.

**Controls:** Subject with whom comparison is made in a case-control study or other type of epidemiologic study. Selection of appropriate controls is crucial to the validity of epidemiologic studies.

**Control food sample**: A portion of food that was prepared in similar manner but not involved in the outbreak.

**Epidemic:** The occurrence of more cases of disease than expected in a given area or among a specific group of people during a particular period of time.

**Epidemic curve (Epi curve):** A histogram plotting the distribution of cases by time of onset. Epi curves help characterize an outbreak and give clues about the source of the outbreak (e.g., point source vs. on-going outbreaks).

**Epidemiology:** The study of the distribution and determinants of health-related states or events in specified populations and the application of this study to the control of health problems.

**Foodborne outbreak:** A foodborne outbreak is the occurrence of two or more cases of a similar illness resulting from the ingestion of a common food or different food in a common place.

High-risk group: A group in the community with an elevated risk for a particular disease.

**Host:** A person or other living organism that can be infected by an infectious agent under natural conditions.

**Host factors:** An intrinsic factor (e.g., age, sex, race, behaviors) which influences an individual's exposure, susceptibility or response to a causative agent.

**Incidence rate:** The measure of frequency of new cases of a particular disease in a population during a specified period of time.

**Incubation period:** The period of time between exposure to an infectious agent and the onset of signs and symptoms of disease.

**Index case:** The first case among a number of similar cases that are epidemiologically related.



**Line listing:** A table listing case names, age, sex, onset time, residence, symptoms, employment, etc. which facilitates comparisons of many characteristics for possible similarities or associations.

**Morbidity:** Any departure from a state of physiological or psychological wellbeing.

**Original food sample:** The actual sample portion of the food consumed at the time of the outbreak.

**Onset:** The time the first clinical signs or symptoms begin to occur.

**Outbreak:** Same as epidemic. Often the preferred word as it may avoid the sensationalism associated with the word epidemic.

**Passive Surveillance:** A type of surveillance that relies on regular lab submissions and standard case reports from clinicians.

**PFGE:** Pulsed-field gel electrophoresis – a molecular method that allows for the specific classification of pathogens by "fingerprinting" the DNA from the pathogen; this method generates visually observable patterns which can be digitized and then compared with other pathogens of the same genus and species.

**Point source outbreak:** Outbreak due to exposure of a group of persons to an infectious agent common to the individuals in the group.

**Prevalence:** The number or proportion of cases or events or conditions in a given population.

**Prevalence rate:** The measure of frequency of all current cases of a particular disease, regardless of the time of onset, within a particular population either at a specified instant or during a specified period of time.

**Probable case:** A case that has typical clinical features of the particular disease under investigation without laboratory confirmation.

**PulseNet:** The National Molecular Subtyping Network for Foodborne Disease Surveillance; a network of laboratories throughout the U.S. that perform testing on foodborne pathogens using WGS methods and compare results via images on a computer network.

**Questionnaire:** Predetermined set of questions used to collect data.

**Recreational water:** Waters used for swimming, whirlpools, hot tubs, spas and water parks; it may also include naturally occurring fresh and marine surface waters.

**REDCap:** Secure web application for building and managing online surveys and databases



**Reservoir:** The habitat or organism in which an infectious agent normally lives, grows and multiplies.

**Serotype:** Subdivision of a species or subspecies distinguishable from other strains therein on the basis of antigenic character.

**Sensitive:** Regarding case definitions, this would be using broad parameters to identify as many cases as possible, thereby minimizing the exclusion of possible outbreak-associated cases.

**Specific:** Regarding case definitions, this would be using detailed parameters in an effort to only include cases that are likely to be outbreak-associated. Using specific case definitions allows analysis to focus on true risk factors of ill persons.

**Surveillance:** The detection of health problems through the appropriate collection of data, followed by its collation, analysis, interpretation and dissemination.

**Susceptible:** A person lacking sufficient resistance to a particular disease agent to prevent disease if or when exposed.

**Suspect case:** A person who is associated with an outbreak with signs and symptoms of disease but no confirmed laboratory results.

**Vehicle:** An inanimate intermediary in the indirect transmission of an agent that carries the agent from a reservoir to a susceptible host.

**Virulence:** The degree of pathogenicity of an infectious agent.

**Waterborne outbreak:** Two or more people experience a similar illness after the ingestion of water or after exposure to water used for recreational purposes.

**Whole Genome Sequencing:** A laboratory procedure that determines the order of bases in the genome of an organism in one process.

**Zoonosis:** An infection or an infectious disease transmissible under natural conditions between animals and man.

